



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Antimicrobials Division (7510P)  
1200 Pennsylvania Ave., N.W.  
Washington, D.C. 20460

EPA Reg. Number:

5383-192

Date of Issuance:

5/4/16

NOTICE OF PESTICIDE:

☒ Registration  
☐ Reregistration  
(under FIFRA, as amended)

Term of Issuance:

Conditional

Name of Pesticide Product:

MERGAL GLT25

Name and Address of Registrant (include ZIP Code):

Maureen Miksztal  
Senior Regulatory Manager  
Troy Chemical Corporation  
c/o Troy Corporation  
8 Vreeland Road  
Florham Park, NJ 07932

**Note:** Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Antimicrobials Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Julie Chao, Product Manager 33  
Regulatory Management Branch 1, Antimicrobials Division (7510P)

Date:

5/4/16

2. You are required to comply with the data requirements described in the DCI identified below:

a. Glutaraldehyde GDCI-043901-30859

You must comply with all of the data requirements within the established deadlines. If you have questions about the Generic DCI listed above, you may contact the Reevaluation Team Leader (Team 33): <http://www2.epa.gov/pesticide-contacts/contacts-office-pesticide-programs-antimicrobial-division>.

3. Make the following label changes before you release the product for shipment:

- Revise the EPA Registration Number to read, "EPA Reg. No. 5383-192."

4. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 04/07/2016

If you have any questions, please contact Joe Daniels by phone at (703) 347-8669, or via email at [daniels.joseph@epa.gov](mailto:daniels.joseph@epa.gov).

Sincerely,



Julie Chao, Product Manager 33  
Regulatory Management Branch 1

Enclosure: Accepted Label

PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER**

Corrosive. Causes irreversible eye damage and skin burns. May be fatal if swallowed. Harmful if inhaled. Harmful if absorbed through the skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Do not get in eyes on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish, aquatic invertebrates, oysters and shrimp. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

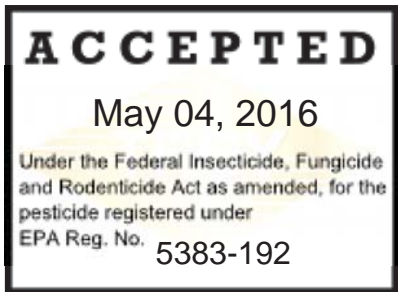
FIRST AID	
IF IN EYES:	<ul style="list-style-type: none"><li>Wash immediately and continuously with flowing water for at least 30 minutes</li><li>Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.</li><li>Call a poison control center or a doctor immediately for treatment advice.</li></ul>
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"><li>Take off contaminated clothing.</li><li>Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>Call a poison control center or doctor for treatment advice.</li></ul>
IF SWALLOWED:	<ul style="list-style-type: none"><li>Call a poison control center or doctor for treatment advice.</li><li>Do not induce vomiting.</li><li>Do not give anything to drink.</li></ul>
IF INHALED:	<ul style="list-style-type: none"><li>Move person to fresh air.</li><li>If person is not breathing call 911 or an ambulance, then give artificial respiration preferably mouth-to-mouth if possible.</li><li>Call a poison control center or doctor for further treatment advice.</li></ul>
Have the MSDS and, if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.	
NOTE TO PHYSICIAN:	
Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.	

**Mergal®GLT25**

**Microbiocide for use in Air Washers, Coatings, Concrete Admixtures, Conveyor Lubricants, Completion and Drilling Fluids, Frac Fluids, Gas and Storage Wells, Heat Transfer Systems, Hydrotesting, Industrial, Institutional and Consumer In-can Processes and Products, Metal Working Fluids, Oil and Gas Production, Packer Fluids, Paper Mills, Pigment and Filler Slurries, Pipeline, Pigging and Scraping, Reverse Osmosis Membranes, Service Water and Auxiliary Systems, Wastewater Systems and Waterfloods.**

EPA Reg. No.	5383-
EPA Establishment Number	35978-TX-001

ACTIVE INGREDIENT: ..... % Weight  
Glutaraldehyde.....**25.0%**  
INERT INGREDIENTS .....**75.0%**  
TOTAL.....**100.0%**



**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

**See Side Panel for Additional Precautionary Statements**

**IN CASE OF EMERGENCY: CALL CHEMTREC 1-800-424-9300**

**Net Weight:**

**Sold by:**

**Troy Chemical Corporation**  
One Avenue L, Newark, N.J. 07105

**DIRECTIONS FOR USE**

*It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.*

In order to determine the most cost effective use level for Mergal GLT25 in a given use, field trials are suggested.

**Water Based Coatings (for use in non-food contact coatings only):** Use from 0.2 to 1.2 pounds of Mergal GLT25 per 1,000 pounds dry powder to produce a concentration of 200 to 1,200 ppm as product (based on slurry solids) in the mixed slurry.

**General Preservative Use:** Mergal GLT25 is recommended for use in aqueous or water containing products and systems, including industrial, institutional and consumer in-can processes and products, to control the growth of bacteria and fungi. For effective preservation, add Mergal GLT25 to the product formulation at a rate of 0.04% to 0.4% based on the water content of the product (0.4 to 4.0 pounds Mergal GLT25 per 1,000 pounds of water content). Mix uniformly.

**Preservatives for Concentrates:** For use in concentrates where effective preservation is needed after dilution, add Mergal GLT25 to the product formulation at a rate such that the diluted end-use product will contain 0.04% to 0.40% Mergal GLT25. At no time during the preservation process should the level of Mergal GLT25 exceed 4.0%.

**Concrete Admixtures:** For effective preservation of concrete admixtures, add Mergal GLT25 to the product formulation at a rate of 4,000 to 16,000 ppm based on the weight of the admixture (4.0 to 16.0 pounds Mergal GLT25 per 1,000 pounds concrete admixture). Mix uniformly.

**Aqueous Metal Working Fluids:** Mergal GLT25 should be added to a metal working fluid system at a point of uniform mixing such as the fluid collection tank. Additions may be made intermittently (SLUG DOSE) at intervals of one week or less.

**Initial Dose:** When the system is noticeably fouled, apply 4.8 to 14.4 fluid ounces (100 to 300 ppm active) of Mergal GLT25 per 100 gallons of metal working fluid to the system. Repeat until control is achieved.

**Subsequent Doses:** When microbial control is evident, add 1.9 to 9.6 fluid ounces (40 to 200 ppm active) of Mergal GLT25 per 100 gallons of metal working fluid to the system weekly, or as needed to maintain control. Badly fouled systems must be cleaned before treatment is begun.

**For further information on uses and use rates see Product Information Sheet.**

**STORAGE AND HANDLING**

Mergal GLT25 is incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. MergalGLT25 can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about 14° F (-10°C). Therefore, unless the storage tank is inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperatures should be avoided. For short storage times (up to 1 month), temperatures of up to 100°F (37.8°C) can be tolerated but the preferred maximum storage temperature is about 80°F (26.7°C). A stainless steel centrifugal pump is suggested for transfer service. Spiral-wound stainless steel with TEFLON® Polymer is suitable for gaskets and packing. Handle in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (MSHA/NIOSH approved air purifying respirator equipped with an organic vapor cartridge) may be required.

**STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**STORAGE:** Do not pour, spill or store near heat or open flame.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL: Refillable container.** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full of water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat the rinsing procedure two more times. Then offer for recycling if available, or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by date and local authorities.

**Non-Refillable container.** Do not reuse or refill container. Triple or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by date and local authorities.

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## **PRODUCT INFORMATION SHEET**

MERGAL<sup>®</sup> GLT25 EPA REG. NO. 5383-

*This document must accompany each shipment of MERGAL GLT25*

### **DIRECTIONS FOR USE**

*It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.*

**WATER BASED CONVEYOR LUBRICANTS (Brewery, Juice, Dairy, Beverage, and Food Processing Systems):** Avoid contamination of food in application of product. Thoroughly clean all tracks and conveyors to remove gross soil. Rinse well. Use an automatic feed system to provide 2.4 to 14.4 fluid ounces (50 to 300 ppm active) of Mergal GLT25 per 100 gallons of diluted lubricant.

#### **AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/ RECIRCULATING COOLING AND PROCESS WATER SYSTEMS:**

This product may be used only in industrial air washers and air washer systems which have mist-eliminating components. For control of microbial growth, MERGAL GLT25 should be added at the application rates described below to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with MERGAL GLT25. Under these conditions, blowdown should be discontinued for up to 24 hours. MERGAL GLT25 can be used in industrial process water systems that contain ultra-filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

##### **INTERMITTENT (SLUG DOSE) METHOD**

**Initial dose:** When the system is noticeably fouled, apply 24 to 48 fluid ounces of MERGAL GLT25 per 1000 gallons of water in the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 9.6 to 24 fluid ounces of MERGAL GLT25 per 1000 gallons of water in the system weekly, or as needed to maintain control. Badly fouled system must be cleaned before treatment is begun.

##### **CONTINUOUS FEE METHOD**

**Initial dose:** When the system is noticeably fouled, apply 24 to 48 fluid ounces of MERGAL GLT25 per 1000 gallons of water in the system.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 4.8 to 24 fluid ounces of MERGAL GLT25 per 1000 gallons of water in the system per day. Badly fouled system must be cleaned before treatment is begun.

#### **SERVICE WATER AND AUXILIARY SYSTEMS**

For control of microbial growth, MERGAL GLT25 should be used at the same application rates and in the same manner as described above. It should be added to the system at a point that will allow for uniform mixing throughout the system.

#### **HEAT TRANSFER SYSTEMS**

(Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts, and Pasteurizers and Warmers) For control of microbial growth, MERGAL GLT25 should be used at the same application rates and in the same manner as described above. It should be added to the system as a point of uniform mixing such as a basin area, sump area, or other reservoir or collection area from which the treated water will be circulated uniformly throughout the system.

#### **INDUSTRIAL WASTEWATER SYSTEMS:**

(Wastewater systems, wastewater sludge and wastewater holding tanks)

MERGAL GLT25 should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. For control of microbial growth, add 10.8 to 54 fluid ounces (0.63 pints to 3.4 quarts (900 to 4,500 ppm) MERGAL GLT25 per 100 gallons of wastewater or sludge.





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### **PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS**

MERGAL GLT25 should be added to the paper making system at a point of uniform mixing such as the beaters, broke chest pump, save-all tank, or white water tank.

**Initial Dose:** When the system is noticeably contaminated, add 1.0 to 6.0lbs of MERGAL GLT25 per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavily fouled systems should be boiled out prior to initial treatment.

**Subsequent Dose:** When microbial control is evident, add 0.6 to 4.0 Lbs. of MERGAL GLT25 per ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

### **PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD**

(For use in food and non-food contact pigments and filler slurries) Use from 0.2 to 1.2 Lbs. of MERGAL GLT25 per 1,000 Lbs. dry powder to produce a concentration of 200 to 1200ppm as product (based on slurry solids) in the mixed slurry.

### **REVERSE OSMOSIS MEMBRANES**

For effective preservation of reverse osmosis elements (where approved for compatibility by membrane manufacturer), immerse elements in a tank containing 0.4% to 4.0% MERGAL GLT25. MERGAL GLT25 can also be added to in-line recirculating systems for preservation of installed out-of-service reverse osmosis equipment (where approved for compatibility by membrane manufacturer). Add 0.4% to 4.0% MERGAL GLT25 to the tank in the circulating system. Maintain the concentration of MERGAL GLT25 by periodic addition to counteract any system leakage.

**WATER FLOODS:** Mergal GLT25 should be added to a water flood system at a point of uniform mixing.

**Initial Treatment:** When the system is noticeably contaminated, add 200 to 10,000 ppm Mergal GLT25 to the system (0.2 to 9.4 gallons Mergal GLT25 per 1,000 gallons flood water). Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 40 to 10,000 ppm Mergal GLT25 (0.04 to 9.4 gallons Mergal GLT25 per 1,000 gallons flood water) to the system weekly, or as needed to maintain control.

Mergal GLT25 is especially recommended for controlling sulfate reducing bacteria in water to be used for polymer treated water-flood programs. Mergal GLT25 does not interfere with the viscosity characteristics of the polymer agent. Mergal GLT25 may be applied in systems used to treat injection water immediately ahead of water de-oiling equipment such as an air flotation unit in the clear water holding tank or at the suction side of the injection pump. Mergal GLT25 should be used full strength in concentration of 30 ppm of Mergal GLT25 on a continuous basis or in slug applications to 5,000 ppm of Mergal GLT25 or higher concentrations as needed (1/4 pint per 1,000 gallons equals approximately 30 ppm). A typical slug application is one quart per 1,000 gallons.

**FRAC FLUIDS (Product not registered for this use in the state of California):** Mergal GLT25 reduces bacterial contamination and degradation of fracturing fluids and gels used in oil and gas well stimulations. Add Mergal GLT25 to the frac water storage tanks or directly in to the well head injection pipeline as the water is being pumped down-hole. Dose range: Mergal GLT25 should be added at a rate of 200 to 10,000 ppm (1.9 to 94 gallons per 10,000 gallons) depending on the degree of bacterial fouling in the source water.

**DRILLING, COMPLETION AND WORKOVER FLUIDS:** Mergal GLT25 should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.

**Initial treatment:** Add 100 to 2,000 ppm Mergal GLT25 (0.4 to 7.9 gallons Mergal GLT25 per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination.

**Maintenance dosage:** Maintain a concentration of 100 to 2,000 ppm Mergal GLT25 by adding 0.4 to 7.9 gallons of Mergal GLT25 per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

**PACKER FLUIDS:** Mergal GLT25 should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 100 to 1,200 ppm Mergal GLT25 (0.4 to 4.7 gallons Mergal GLT25 per 100 barrels of fluid) to a freshly prepared fluid depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.



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**Oil Production and Transmission Pipelines and Systems (Product not registered for this use in the state of California):** Mergal GLT25 should be added to an oil production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of Mergal GLT25 throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect / measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and / or reduced corrosion rates. To facilitate application, it may be desirable to dilute the Mergal GLT25 with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5,000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly or as needed to maintain control.

**Gas Production and Transmission Pipelines and Systems (Product not registered for this use in the state of California):** Mergal GLT25 should be added to a gas production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of Mergal GLT25 throughout the entire internal pipeline surface by adding a sufficient amount of biocide to detect / measure a residual concentration at the back end of the pipeline system. Criteria for success of the treatment will be a reduction in bacterial counts and / or reduced corrosion rates. To facilitate application, it may be desirable to dilute the Mergal GLT25 with an appropriate solvent immediately before use. The concentration in the solvent should not fall below an active concentration range of 500 to 5,000 ppm based on the volume of water in the pipeline. Injections to the system should be weekly or as needed to maintain control.

**Gas Storage Wells and Systems:** Individual injection wells should be treated with sufficient quantity of Mergal GLT25 to produce a concentration of 1,000 to 10,000 ppm Mergal GLT25 when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated yearly, or as needed to maintain control. Individual drips should be treated with a sufficient quantity of Mergal GLT25 to produce a concentration of 400 to 4,000 ppm Mergal GLT25 when diluted by the water present in the drip. Injections should be repeated yearly, or as needed to maintain control.

**Hydrotesting:** Water used to hydro-test pipelines or vessels should contain 200 to 8,000 ppm Mergal GLT25 (0.2 to 7.5 gallons Mergal GLT25 per 1,000 gallons water), depending on water quality and length of time the equipment will remain idle.

**Pipeline Pigging and Scraping Operations:** Add Mergal GLT25 to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and a trailing pig). Sufficient Mergal GLT25 should be added to produce a concentration of 0.2 to 2.0% (0.2 to 1.9 gallons Mergal GLT25 per 100 gallons water), depending on the length of the pipeline and the severity of biofouling.

TROY CHEMICAL COMPANY  
One Avenue L  
Newark, N.J. 07105

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